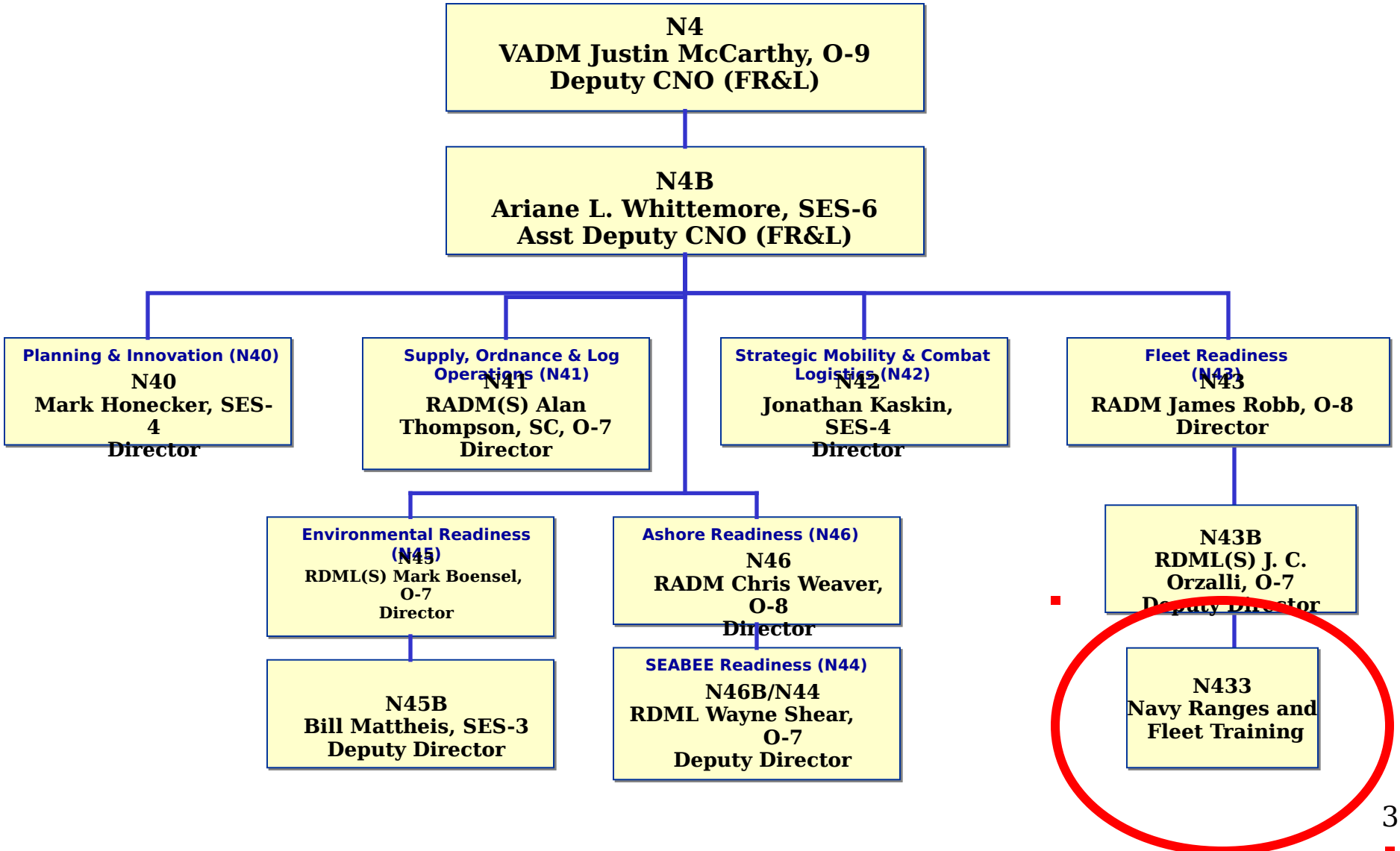
43rd Annual NDIA Targets, UAVs and Range Operations Symposium & Exhibition

Captain John Schwering
Navy Ranges and Fleet Training
OPNAV N433

Overview

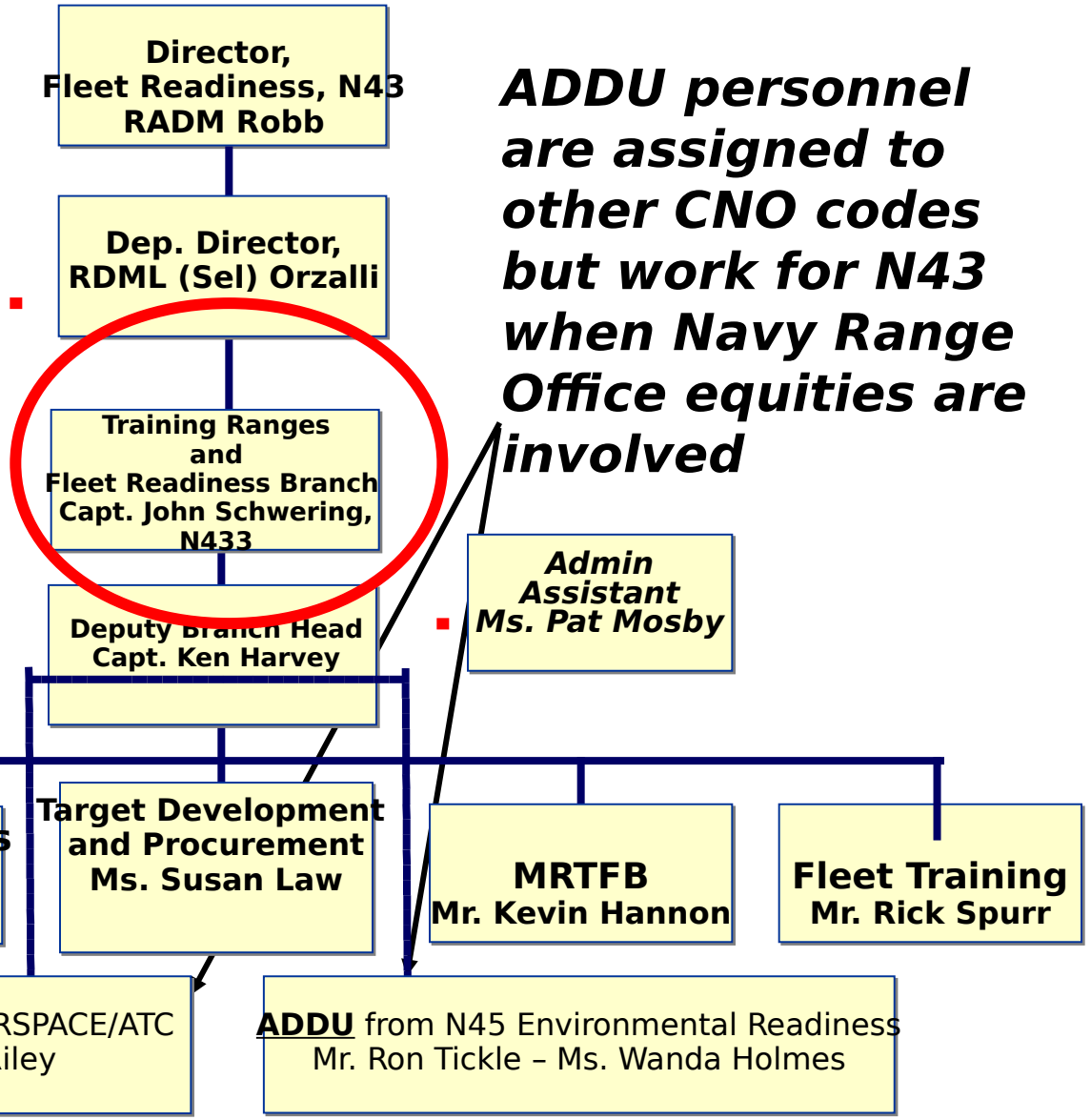
- Navy Organization for Ranges and Targets
- Navy Range Office Branch Responsibilities
- Navy Training Ranges Locations and Capabilities
- Range Operations - Navy HQ Perspective
- Resourcing Ranges and Range Operations
  - Investment and Modernization
  - Targets
  - Range Operations and Maintenance
- Big Picture Range Sustainability
- Summary

CNO N4 Organization



CNO N433 Organization

5 military
3 GS
7 Contractors
2 Detailees
3 ADDU
20 assigned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Range Sustainment Lt. Craig Schuenemann
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MRTFB Mr. Kevin Hannon
Fleet Training Mr. Rick Spurr
ADDU from N785 AIRSPACE/ATC CDR Steve Riley
ADDU from N45 Environmental Readiness Mr. Ron Tickle – Ms. Wanda Holmes

ADDU personnel are assigned to other CNO codes but work for N43 when Navy Range Office equities are involved

N433 – Navy Ranges and Fleet Training

- **N433 Ranges**
  - **Training Ranges – support combat readiness for Fleet training customers**
  - **Major Range and Test Facility Base (MRTFB) ranges – provide institutional maintenance and operations support to the Test and Evaluation (T&E) ranges and activities that make up the Navy portion of the Department of Defense's MRTFB**
- **Fleet Training**
  - **Fund implementation of Fleet Training Support, Synthetic Fleet Training, Fleet Training Management and Joint Training**
- **Range Sustainment**
  - **Tactical Training Theater Assessment and Planning Program (TAP)**
- **Targets**
  - **Develop, procure, and maintain, aerial, seaborne, mobile ground, and subsurface targets and target control systems in support of Fleet training, and test and evaluation operations.**
  - **Includes RDT&EN, OMN, OPN, and WPN funds**

Training Range Summary by Location and Capability

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FRTC
NAS Fallon, NV
- Warning Areas and SUA
- Tactical Air Combat Training System
- EW emitters
- Tracking and surveillance radars
- Full range land target services
- Live weapon impact area/target

WHIDBEY ISLAND RC
- Warning Areas and SUA
- Boardman Target Area
- Limited tracking and surveillance radars
- MK30 capability

OCEANA/VACAPES
NAS Oceana
- Tactical Air Combat Training System
- Large Area Tracking Range
- Target services
- Warning Areas and SUA
- Navy Dare Target Range

EL CENTRO, CA
- SUA
- Target complex

CHERRY POINT RC
MCB Cherry Pt
- Mid-Atlantic EW Range
- Tactical Air Combat Training System
- Warning areas and SUA

SCORE
NAS North Is
- Supports all warfare areas:
- Warning Areas and SUA
- Underwater Tracking Ranges
- Large Area Tracking Range
- EW emitters
- Tracking and surveillance radars
- Full range of target services including MK30
- Live weapon impact area/target
- Amphibious Landing Area

PINECASTLE TARGET, FL
- SUA
- Live and inert target complex

BEAUFORT RC
MCAS Beaufort
- Tactical Air Combat Training System
- Warning areas and SUA

KEY WEST
NAS Key West
- Tactical Air Combat Training System
- Warning Areas and SUA

YUMA RC
MCAS Yuma
- Warning Areas and SUA
- Tactical Air Combat Training System
- Tracking and surveillance radars
- EW emitters
- Target services

Avon Park, FL
- SUA
- Live and inert target complex

- Fleet Training resources maintain a MK30 capability at AUTEC

Western Pacific Training Ranges

JAPAN RC
Western Pacific
- Warning Areas and SUA
- Underwater Tracking Ranges
- Large Area Tracking Range
- EW emitters
- Tracking and surveillance radars
- Target services

MARIANAS RC
Western Pacific
- Warning Area
- Ground impact target and scoring

Okinawa Area
Western Pacific
- Warning Area
- Ground impact target and scoring
- MK30 Capability is proposed

PMRF
Barking Sands, HI
- Warning Areas and SUA
- Underwater Tracking Ranges
- Large Area Tracking Range
- EW emitters
- Tracking and surveillance radars
- Target services including MK30

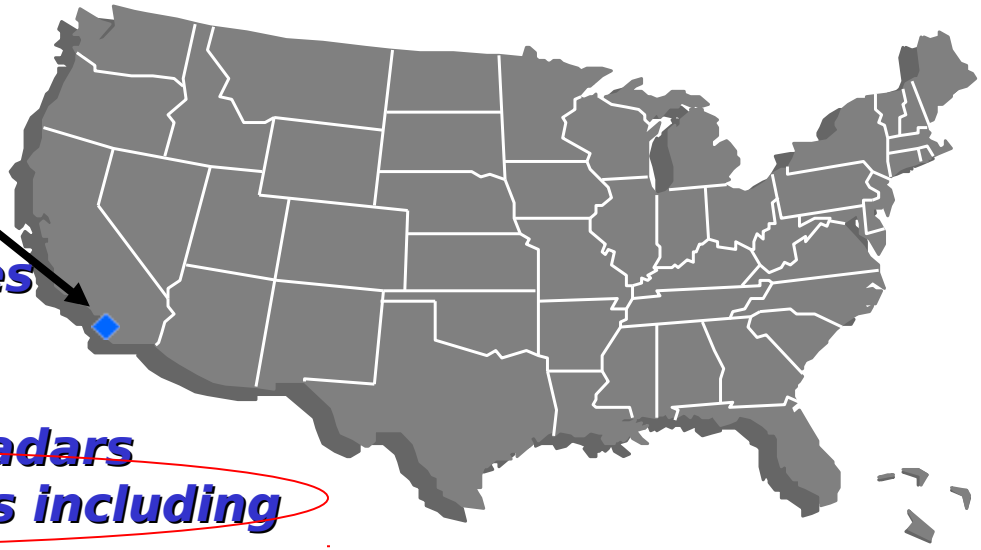
RED - Indicates Marine Corp (BISOG)

SCORE Specifics

SCORE

NAS North Is

- ***Supports all warfare areas:***
- ***Warning Areas and SUA***
- ***Underwater Tracking Ranges***
- ***Large Area Tracking Range***
- ***EW emitters***
- ***Tracking and surveillance radars***
- ***Full range of target services including MK30***
- ***Live weapon impact area/target***
- ***Amphibious Landing Area***

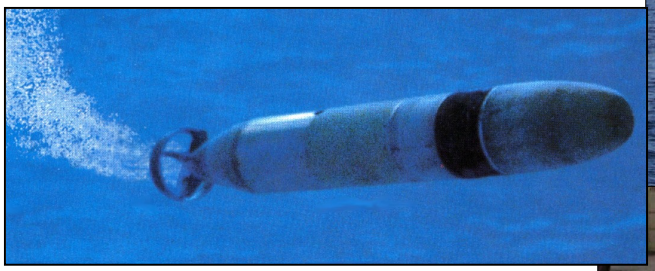


SCORE provides training in all warfare areas as well all categories/levels of training

- **Individual, unit, and Strike Group training**
- **Basic (backyard), intermediate, advanced training**
- **Depends on installation support**
- **Provides services to T&E customers as priorities allow**
- ***Not all ranges are full service like SCORE! Range capability at locations like Key West, Cherry Point, Pinecastle provide for the "local" requirements***

Targets Under N433 Cognizance

- **Aerial Targets**
  - **Subsonic, Supersonic, Full Scale**
  - **Tow Banners, Decoys**
- **Seaborne Targets**
  - **Expendable powered**
  - **Expendable towed**
- **ASW Targets**
  - **Submarine Surrogates**
    - ***Mk 39***
    - ***Mk 30***
- **Ground Targets**
  - **Fixed and Mobile**
- **Mine Targets**
  - **Versatile Exercise Mine System (VEMS)**
  - **Mine Countermeasures Training Targets**



Investment and Modernization… Targets Focus

- **Target development and procurement supports combat readiness, realistic training, and T&E requirements**
- **Congressional law for weapon systems to conduct realistic lethality testing**
  - **United States Code Title 10, Chapter 139, Section 2366**
- **Work to refine test and training requirements and match the appropriate target to that requirement**
- **Targets and required support must not only be representative of the threat, but must be mobile to operate in various environments**
  - **Fixed Navy Range, Other Service, and Open Ocean Operations**

Target Special Considerations

- **Targets programs have extraordinary levels of interest and oversight**
  - **DOT&E**
    - ***Directed development of "Threat D" (an aerial Supersonic Sea Skimming Target) as a prerequisite for TEMP approvals***
  - **OSD**
    - ***Commissioned Whitney, Bradley & Brown (WBB) to assess target command and control requirements and develop recommendations for future development***
  - **AT&L**
    - ***Directed Defense Science Board (DSB) review of aerial targets programs and periodic briefs***
  - **Defense Acquisition Executive (DAE)**
    - ***Tasking to brief issues associated with aerial target development and availability***
  - **DTRMC for Test and Evaluation**
    - ***Under Congressional direction to review and approve targets budget***
- **Operational Testers directly or indirectly generate all emerging target requirements**
  - **Entire RDT&E bill is in support of weapon systems T&E**

Range Operations – Navy HQ View

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- **Range operations at the HQ level are ultimately about resources applied across two broad expenditure categories**
  - **Investment and modernization – TSPI, targets, EW emitters, etc**
  - **Operations and maintenance for range infrastructure, includes program manager support to the Fleet**
- **The strategic aim is to provide the Fleet customer with the capabilities required to attain combat readiness**
- **The key to successful training range program is to achieve sustainability of range capability and training space**
- **The elements of training range sustainability are**:
  - **Fiscal responsibility**
  - **Ground truth record**
  - **Minding the seams that exist between supporting and surrounding entities (installations, environmental readiness, airspace, etc.)**
  - **Attaining efficiencies through joint investment in systems and cross-use by Fleet users of T&E and other service capabilities**

Investment and Modernization

- **Within the Navy and DoD, ranges are competing with platforms and weapons for scarce resources**
- **Within the range program, demand for resources is growing for existing requirements**
  - **Replacement of legacy systems**
  - **Building on-range EW training capability**
- **Capability modernization**
  - **Emphasis on shallow water ASW training (Under Sea Warfare Training Range)**
  - **Conversion to modern range support communications systems, and range management systems**
- **Requirements Assessment**
  - **Scarce resources have to applied to (validated by) application to the essential investment and OM priorities**

Ranges Operations and Maintenance

- **Keep the TSPI, scoring, EW, and target hardware up and running…**
  - **… maintain scheduling and coordination responsibilities, operate range support vessel, use other service and T&E ranges for training, operate targets, and pay for range operating contracts**
  - **Etc., etc., etc.,**

- **Operational Range Clearance (ORC)**
  - **An "operational" environmental problem… not an environmental readiness (N46) problem**
  - **N43 sets and maintains Navy's ORC policy**
  - **Keep ranges clear of debris and and UXO to avoid long-range environmental problems (leaching into ground water) that could bring on range closure and prevent spectral hazard during laser aiming training**

Range Sustainability

- **Plan for range sustainability - Establish long-range vision for requirements, infrastructure, environmental compliance - maintain viability of range capabilities and access to training space**
  - **Required Capabilities Document (RCD)**
  - **Tactical Training Theater Assessment and Planning Program (TAP)**
  - **Range Complex Management Plans (RCMP, a part of TAP)**

Range Sustainability (con't)

- **Aggressively and cooperatively manage the seams of responsibility with Environmental Readiness (N45), Ashore Readiness (N46) – budgets, policy, and responsibilities have to complimentary without overlap**
  - **Assess the requirement, defend the requirement**
  - **ORC,**
  - **Utilities, security,**

- **Plan for and resource for environmental actions required to maintain access to range space and capability**

- **Provide for range sustainment through sound land management practice in coordination with environmental interests**

Summary

- **The operational Fleet drives requirements, then…**
- **At the HQ level we resource investment in those requirements and other responsibilities, such as environmental compliance and the required O&M tail**
- **Bottom Line: the objective of Range Operations from the HQ viewpoint is to provide access and functionality to ranges**